

Title (en)

SYSTEM AND METHOD TO CORRECT FOR DISTORTION CAUSED BY BULK HEATING IN A SUBSTRATE

Title (de)

SYSTEM UND VERFAHREN ZUR KORREKTUR VON DURCH VOLUMENEUFHEIZUNG IN EINEM SUBSTRAT VERURSACHTEN VERZERRUNGEN

Title (fr)

SYSTEME ET PROCEDE DE CORRECTION DE LA DISTORSION PROVOQUEE PAR UN CHAUFFAGE DE MASSE DANS UN SUBSTRAT

Publication

EP 1095393 A2 20010502 (EN)

Application

EP 00923351 A 20000412

Priority

- US 0010038 W 20000412
- US 29116799 A 19990413

Abstract (en)

[origin: WO0062324A2] An electron beam writing system includes an electron beam patterning machine operable to emit an electron beam to form a pattern on a substrate. A computer control system, coupled to the electron beam patterning machine, has a plurality of pre-computed distortion maps. Each distortion map describes expected distortions of the substrate caused by bulk heating resulting from exposure to the electron beam. The computer control system controls the electron beam patterning machine using the distortion maps in order to adjust for the expected distortions.

IPC 1-7

H01J 37/317

IPC 8 full level

G03F 7/20 (2006.01); **G06F 19/00** (2006.01); **H01J 37/147** (2006.01); **H01J 37/30** (2006.01); **H01J 37/305** (2006.01); **H01J 37/317** (2006.01); **H01L 21/027** (2006.01)

IPC 8 main group level

H01J (2006.01)

CPC (source: EP KR US)

B82Y 10/00 (2013.01 - EP US); **B82Y 40/00** (2013.01 - EP US); **H01J 37/30** (2013.01 - KR); **H01J 37/3174** (2013.01 - EP US); **H01J 2237/30455** (2013.01 - EP US); **H01J 2237/30461** (2013.01 - EP US)

Citation (search report)

See references of WO 0062324A2

Designated contracting state (EPC)

DE GB NL

DOCDB simple family (publication)

WO 0062324 A2 20001019; **WO 0062324 A3 20010215**; AU 4349200 A 20001114; CA 2334388 A1 20001019; DE 60039952 D1 20081002; EP 1095393 A2 20010502; EP 1095393 B1 20080820; IL 139869 A0 20020210; JP 2002541676 A 20021203; JP 2004312030 A 20041104; JP 3615149 B2 20050126; JP 4511242 B2 20100728; KR 100446054 B1 20040830; KR 20010052821 A 20010625; US 6424879 B1 20020723

DOCDB simple family (application)

US 0010038 W 20000412; AU 4349200 A 20000412; CA 2334388 A 20000412; DE 60039952 T 20000412; EP 00923351 A 20000412; IL 13986900 A 20000412; JP 2000611302 A 20000412; JP 2004152437 A 20040521; KR 20007014144 A 20001213; US 29116799 A 19990413